

## Episode 146 Transcript

00:00:00:00 - 00:00:15:01

Alan Bauman, MD

A lot of women do need hair transplants by the time they get to me, and unfortunately, it's because they've had some pretty poor advice along the way. Their typical dermatologist has kind of either shrug them off for the first ten years of their hair loss situation, or told them to go buy some Rogaine.

00:00:15:03 - 00:00:40:12

Jaclyn Smeaton, ND

Welcome to the DUTCH podcast, where we dive deep into the science of hormones, wellness, and personalized health care. I'm Doctor Jaclyn Smeaton, chief medical officer at DUTCH. Join us every Tuesday as we bring you expert insights, cutting edge research, and practical tips to help you take control of your health from the inside out. Whether you're a health care professional or simply looking to optimize your own well-being, we've got you covered.

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Jaclyn Smeaton, ND

The contents of this podcast are for educational and informational purposes only. This information is not to be interpreted or mistaken for medical advice. Consult your health care provider for medical advice, diagnosis and treatment. Hi there and welcome to this week's episode of the DUTCH podcast. I'm so excited to dive in deeper with a guest that we've had on before, Doctor Alan Bauman.

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Jaclyn Smeaton, ND

He's a hair transplantation physician and specialist, and he knows everything about hair, health, everything from how to maintain scalp health to all the different steps that you can take if you're losing hair. From nutritional strategies, topicals, medications, and even hair transplantation and advanced therapies like stem cell, red light, PRP, etc.. So we had a great conversation a couple of years ago, but really we wanted to dive in more on hair for menopausal women.

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Jaclyn Smeaton, ND

And really all the changes that happen to women. And does that change what might work for them when it comes to their hair? Our guest is a board certified hair

restoration physician with over 29 years of experience, and he's the founder and CEO of Bauman Medical, which is an internationally recognized hair restoration center in Boca Raton, Florida. He trained at New York Medical College, went through a surgical residency at Beth Israel and Mount Sinai Medical Centers, and then moved on to specialize in hair transplant surgery and hair loss treatment, with a focus on Andrew Genetic alopecia, which is the androgen related alopecia, or hair loss.

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Jaclyn Smeaton, ND

Doctor Bauman has done over 14,000 transplant procedures, over 15,000 PRP hair regrowth treatments. He's treated over 30,000 patients. He's so experienced, and he's one of the only 200 physicians worldwide who is certified by the American Board of Hair Restoration Surgery. He is also great at breaking things down, exactly what's going on and what we can do about it.

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Jaclyn Smeaton, ND

And I think you're going to have some really critical takeaways today where if you're concerned about hair loss, even early, even you're kind of early in that stage of thinking this might be a problem for you. He provides some really great strategies for you to pursue. Let's go ahead and dive into the episode. Doctor Robert, I'm so glad to have you back on the podcast.

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Jaclyn Smeaton, ND

It's been almost two years since you've been on, so I'm glad to have you back. Time flies though.

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Alan Bauman, MD

Absolutely time flies. Great to be back with you.

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Jaclyn Smeaton, ND

Yeah. So today we're going to be talking about menopausal hair loss and hair loss and women. This is a topic that you know women so many women suffer with. And so I'm really excited to dive in. But before we do I always love for our guests to kind of get to know your backstory a little bit more. I don't think I asked you that last time.

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Jaclyn Smeaton, ND

Can you share a bit about like, what initially drew you to hair restoration and kind of how your clinical experience has shaped the way you approach hair today?

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Alan Bauman, MD

Yes. Well, I don't think anybody is really born into the world of hair restoration or hair transplantation. Certainly I wasn't born into it. But I did think I was going to go to medical school, at an early age. I was interested in medicine. My dad is a dentist, and I had my uncles, a gastroenterologist and my grandfather a PhD.

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Alan Bauman, MD

And so I had a very strong interest in science and math. And luckily, I was able to pursue a career in medicine. I was mentored by a plastic surgeon at a very early age, actually, before I could drive a car. So I was always thinking something cosmetic. I was fascinated by what he did with improving form and function.

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Alan Bauman, MD

You know, restoring people's form and function and really changing people's lives using that surgical skill of his. But it wasn't until I was later on in my training after medical school, in my general surgery training, did I find out really about how hair transplantation was really working? And in the mid 1990s, hair transplants were basically considered kind of plug and most of the time pretty painful.

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Alan Bauman, MD

And I was of the inkling that, you know, why would anyone ever want to do that or perform that? It really wasn't on my radar at all until I met a patient who had had a hair transplant, and he was coming in for some other cosmetic procedure. And I was fascinated by the fact that I really couldn't tell that he had had a hair transplant.

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Alan Bauman, MD

So of course, I was asking him, where did you have your hair transplanted? I was thinking like anatomically, he was thinking geographically. So I went to Turkey. So he had gone to Toronto and I thought that was kind of interesting, too. He had sought

out this specialized physician, and he was thrilled to realize that I didn't see that it was a transplant.

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Alan Bauman, MD

So we had a kind of a deep conversation there. And he told me about the artistry in the technology from a layman's point of view. But what I remember most from that conversation was how it changed his life. And he shared with me really how his life was never the same. After the hair transplant. He showed me pictures of his wife and kids, and he was telling me about his job opportunities, and he became a CEO of this big company and that and such and so forth.

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Alan Bauman, MD

So I figured maybe I should look into this as something to add to my plastic surgery repertoire. And that's really how I got started. And at least thinking about hair. Aside from watching my dad go bald at an early age and, my sister and I making fun of him to the point where he got a hairpiece.

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Alan Bauman, MD

You know, my early education and hair loss really was not much more than that. But, after watching and seeing how hair transplantation was performed, I traveled around the world, visiting different physicians, looking at different conferences and really learning about how hair transplants, modern hair transplants worked. Then I got excited about it. And once I got into the fellowship program, then, eventually I realized that this is not something you could do kind of on the side, at least not properly, you know, and so it I decided at that time I was going to focus on it specifically and really dive in and really make it, make it as my primary specialty.

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Alan Bauman, MD

So fast forward a little bit of time. I moved down to Boca Raton with my wife, and we opened the practice, 1000ft<sup>2</sup>, one operatory, no patients, no contacts. And, we just kind of started to work and, get the word out, essentially. And so my wife answered the phones and I would do the consultations, and I would bring the team to help me in on the weekends.

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Alan Bauman, MD

And eventually it grew. And so it's been a quick, 29 years since then, I've treated over 30,000 patients and done over 14,000 surgeries, and I've seen amazing changes in the world of hair loss and hair restoration treatments, and especially on the surgical side, and even what's coming around the corner. So it's been an incredible journey. It's just flown by.

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Alan Bauman, MD

It's amazing. And, I, you know, I'm working every day. I'm operating. I'm in the O.R. every single day. So, during the weekend, it's, it's a it's a fun practice to have, and it's a fun team to have built. Now, we have 35 team members in the practice, and I have an associate physician. I have a department specifically for scalp health.

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Alan Bauman, MD

I have an esthetician. I have, an administrative team and a clinical team. Many of them just do intake, meaning just evaluations and measurements for me before I see the patients and post-operative care and things like that. So it's it's pretty exciting, field to be in. And certainly as you mentioned, Turkey, a lot of things have changed in the industry over time as well.

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Jaclyn Smeaton, ND

Yeah, definitely. I mean, I love that you mentioned it was like the impact of the procedure on this person's life that really changed your life because that seems it seems I mean, people think about cosmetic changes as being not important, but for so many people that are so important to how you see, how you see yourself and you want to look in the mirror and you want that image to reflect back the way you feel inside.

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Jaclyn Smeaton, ND

And I think it's just such an interesting thing, because I think hair is one of those things that for a lot of people, I mean, I've worked with so many women in pregnancy and postpartum where you get that natural hair shedding after pregnancy, but the level of concern is so high when women start to lose their hair, and I'm sure for men as well.

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Alan Bauman, MD

Oh, absolutely. We say hair is a very emotional organ. Yeah. And you know, you can live fine without your hair. Certainly. There are great examples of that out there in the world. But for those of us, you know, who like their hair, want to keep their hair, you know, if you start to see a couple of extra strands in the brush or, you know, on the bed linens or in the shower drain, you know, you start to get concerned and of course, your hair is an important indicator of our health and vitality.

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Alan Bauman, MD

It's an important indicator of our fertility and our age. And so, you know, we live in a society where we want to look as good as we feel. And our ability to do that, is now available. Right? So we can we can feel good longer through various lifestyle choices, maybe supplementation, maybe other things, hormone optimization. But, you know, those things don't necessarily address hair loss.

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Alan Bauman, MD

And so if you're talking about aging when it comes to your hair, you know, then you have to you need a professional, right? You need a specialist to help you along in that part of your journey. And you can't separate the mind and the body. I mean, it's just not going to work, right? It's just totally not going to work that way.

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Alan Bauman, MD

You're going to need to have some help, to get the treatments and procedures oriented so, you know, so that you can get the results that you need.

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Jaclyn Smeaton, ND

Yeah, absolutely. Well, I think for listeners, if you are wanting kind of the basics about hair loss and the basics about things like scalp care that you mentioned in treatment, I'd encourage you to listen to the episode that we did. It was February 2024. If you scroll back in prior seasons, you can have a listen because we really cover this topic from a very comprehensive perspective.

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Jaclyn Smeaton, ND

And it was such a great orientation. So if you're listening and you want to dive into a lot of those things Doctor Bauman talked about, I'd encourage you to have a listen to that episode. Today. We want to focus in a little bit on one patient population, which is menopausal women. Like I said, now, when women enter menopause, a lot of times they notice thinning of their hair or increased shedding.

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Jaclyn Smeaton, ND

Or also, I would say changes in texture is another big one, not just graying, but like actually changes in the texture of their hair. Why do these hormonal shifts end up influencing our hair?

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Alan Bauman, MD

Yeah, well, just like I said, that, you know, hair is a very emotional organ. It works the other way, too. It's a very hormonal organ. There are many effects of hormones on the hair. And so we don't know exactly what the right hormone sequence or volume should be to impact the hair follicle that a lot of that needs to be elucidated in the clinical and, medical research.

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Alan Bauman, MD

But what we do know is what you've said, and we can point to some different things that happen along the, women's lifespan, let's say. And so we know, for example, the most common hormone abnormality of childbearing age, PCOS for example, is related to androgen sensitivity. And that's often associated with hair loss as well as acne, weight gain and other inflammatory factors and things such as that.

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Alan Bauman, MD

And so what's going on with androgens in PCOS in particular, is that their increase in androgen sensitivity is causing some degree of what looks like female pattern hair loss. And so it could be a loss of coverage. It could be some excessive shedding. It could be changes in hair quality, as you mentioned. So that gives us a little bit of insight.

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Alan Bauman, MD

And then the next thing is usually childbirth. And I think you had mentioned that

either off and in the beginning of our conversation.

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Jaclyn Smeaton, ND

Today with live, I have you mean it happens to so many women? It's like they could come in and have a million questions about the baby, but they're just like, why am I losing? My hair is not working. What's happening? Yeah.

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Alan Bauman, MD

Right. So during pregnancy, the vast majority of women know a flourishing of their hair. More hair follicles stay in the growing phase, the antigen phase. So the hair grows longer, it doesn't shed as much. And those hairs that are in the growing phase longer, they tend to grow thicker, stronger, healthier hair over time. And so when you're pregnant every month that goes by, it just seems like your hair is flourishing.

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Alan Bauman, MD

And we know those hormones are at high levels during that pregnancy to support the development of the baby and so forth. As we go forward through that process of gestation and then you have childbirth immediately within 24 hours, those hormones crash and the hair loss doesn't happen immediately. Actually, the hair loss happens usually within about six weeks after that.

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Alan Bauman, MD

In terms of the antigen to telogen ratio, that means the hair follicle ratios that are growing and resting go back to normal. And so it can be a very severe shed that occurs at that time and usually 6 to 12 weeks out. That's when those, those, follicles that have turned off, are now releasing the hair, and you're seeing the hair in the brush and the drain and so forth.

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Alan Bauman, MD

But what we also notice is that women who are, let's say, more sensitive or more prone to female pattern hair loss, it seems to be much worse in their particular situation, because, you know, the OB GYNs love to say and the, you know, the traditional general practitioners will tell you, oh, it's going to normalize, it's going to get better or you're going to go back to normal.

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Alan Bauman, MD

But unfortunately, in a subpopulation, that's not the case. And actually it's just an aggressive acceleration of hair loss. And a lot of women who have had, let's say, back to back pregnancies often realize this as well. And so you get the early signs of female pattern hair loss after that childbirth situation happens. And then, as you mentioned, perimenopause, other disruptions in hormones.

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Alan Bauman, MD

Is it the thyroid? Is it other things? Is it the female hormones? Is it the ratio of male to female hormones? That could be also another major factor. And we see the hair thinning and also the changes as you mentioned, and texture and quality and volume and coverage and so forth.

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Jaclyn Smeaton, ND

Yeah. Androgynous are such an interesting one because, when you have like PCOS is a great example, you are growing hair where you don't want it and losing it where you do want it, and it just seems so backwards and awful.

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Alan Bauman, MD

Right? Well, actually, that's what happens in, male puberty. Actually, that's a good point, is that, you know, men start growing hair like, you know, their hairy legs start growing, you know, hair on their chest, obviously. And some men are starting to see the early signs of male pattern hair loss right here in the, you know, staring them in the mirror when their hairline starts to recede.

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Alan Bauman, MD

And that can happen immediately right after puberty, even before you start to see some thinning in the Crown area. So androgens, just like many other lock and key combinations of, you know, receptors in the body, let's say sometimes they do different things depending on where they're located. So, the body follicles, you know, and the men, for example, they are stimulated by the androgens, you know, the beard, pubic regions and so forth under your arms.

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Alan Bauman, MD

But then the hair on the scalp is diminished and miniaturized. Those follicles are are, going to be regressing instead of progressing. And so very often that's what happens as well in women. But it looks different in women, right. When that.

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Jaclyn Smeaton, ND

Happens. Yeah. Yeah, definitely. You know, I've never looked at the research on men, but we measure a metabolite of DHT called five alpha interesting diol, which is really the data is so interesting because it's a better indicator of or a predictor of androgenic symptoms in women with PCOS. And it's really because it's DHT doesn't leave the cell very well.

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Jaclyn Smeaton, ND

So it transforms into five alpha. And then that gets excreted into the urine as the metabolite it. And I wonder if there's data on men and like male pattern baldness around that because it's DHT connected for men. Right.

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Alan Bauman, MD

Oftentimes. Yeah. You know, I'm not I'm not really familiar with any research on those metabolites.

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Jaclyn Smeaton, ND

But do we have a white paper. It's on women I think it's specifically to women. But I'll send it over. It just summarizes all the data. I'll send it to you because I think you'd find it.

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Alan Bauman, MD

Interesting that sounds amazing. Yeah, I'm I'm really interested in that. Of course, we know in men, DHT is the primary trigger for male pattern hair loss. And the best way to to understand that is by reducing the DHT, even by just 60%. Let's say in the serum, you can have a 90% success rate in keeping people's follicles looking the same or better, men's follicles looking the same, or better over the long run.

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Alan Bauman, MD

So that's a pretty good success rate in just modulating the DHT a little bit. And there are other medications that can go even lower. You know, what I was talking about was finasteride. You can also use do to try to lower it or even further down, maybe like 80, 90% down, from baseline levels. And you get even stronger regrowth, stronger, resistance to the male pattern hair loss process.

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Alan Bauman, MD

And many of our, our post-menopausal women do respond to, five alpha reductase inhibitors such as finasteride and do pasteurized. And so, sometimes this is elucidated more frequently through genetic Testing. And we can talk about that. Like what Tests should you have and what does it reveal. But, you know, it's not the only answer in men.

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Alan Bauman, MD

It's a little bit more simple. At women, it's always more complicated.

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Jaclyn Smeaton, ND

I know there's just.

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Alan Bauman, MD

Why it.

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Jaclyn Smeaton, ND

Matter. I was like, why are women so complicated? Not just medically, just across the board. Right. Yeah.

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Alan Bauman, MD

So but I think disagreement there.

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Jaclyn Smeaton, ND

Let's talk a little bit about the female pattern. You've said that a couple times. Female pattern hair loss and the female pattern. What is it that you expect with kind of those the female pattern loss with hormonal change.

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Alan Bauman, MD

Yeah. So it's very different than the early male pattern hair loss, which is an immediate recession of the hairline and balding spot on the crown. And then a confluence of those areas in women. It's much more diffuse. Now, some of the, ideas and concepts are the same, like the round the sides in the back of the scalp.

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Alan Bauman, MD

If you're not torturing that area with extensions, let's say, those areas should be relatively permanent as they are in men. But what we see in our women is that there's a diffuse loss in that frontal zone. And so what that looks like typically is a little bit of a wider part line, less hair around the framing of the face.

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Alan Bauman, MD

And later on you could certainly get a recession of the hairline. And this is most commonly seen accelerating in women who are using Testosterone, in hormone replacement and during menopause. And you can actually get what almost looks like a male pattern process where their hairline literally recedes. And I've seen that very commonly in women who are androgen sensitive, and they may not have known it previously, and they're treated with Testosterone, aggressively.

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Alan Bauman, MD

Let's say pellets are probably the most aggressive way to treat and, also hard to stop. You just kind of wait for it to dissipate. Right? If you've been pelleted with Testosterone and oftentimes if you've if it's overdone, it can really destroy and eliminate the whole frame of the face.

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Jaclyn Smeaton, ND

Yeah. I hear a line like, if you're on Instagram, even like all the hair products, all the women are kind of judging their efficacy by that, like upper temple area or like that area. That's right. At the sides of the I'm trying to describe it to people that are

listening and not watching, like at the sides of your forehead.

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Jaclyn Smeaton, ND

I think probably, you know, when you lose that, that's an area that thins first. Is that more is that more female pattern or male pattern or really? Well, they're just a sensitive area.

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Alan Bauman, MD

I would say it's more male pattern, but it also can happen in female loss as well. And if you're looking, you're trying to judge it on your own in the mirror. Obviously it's the first thing you see when you comb your hair back. A lot of women will wear hair down over those areas. And so it's almost like hidden, almost like guys wearing a baseball hat, right?

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Alan Bauman, MD

They don't see their hair loss. And then when they decide to like, take off their hat after a couple of years are like, oh my God, what happened? So if you're combing your hair back or you're going out to play tennis or pickleball or something like that and get your hair pulled back, and all of a sudden you notice your hairline has receded, you know, it's usually not from the hairstyle, but typically from female pattern hair loss.

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Alan Bauman, MD

Yeah. And so, but look, monitoring hair loss on your own, this is an important concept. And we probably covered it last time. You know, you can lose 50% of your density without it being noticeable to the naked eye. And this is really, really important. That means you can lose a lot of hair and still look about the same.

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Alan Bauman, MD

It's is more, common for men. Women typically are better at kind of inventorying their hair, but oftentimes because their hair is longer and they're doing different things in terms of styling and managing. And and also probably have a stylist who's, who's, watching their hair over time and helping them style and manage it with different products and so forth.

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Alan Bauman, MD

But generally, just the appearance of hair loss requires a loss of 50% density. So this the reason why I mention this is because it underscores the need for some kind of more detailed evaluation than just looky Lou in the mirror, okay, get a microscope on your scalp, get a density measurement. We have these tools available today in our consultation offices and our consultation rooms.

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Alan Bauman, MD

We can now do an AI powered microscopic evaluation and measure the differences between the more permanent zones to the less permanent zones on your scalp, the areas that are more prone to hair loss. We measure not only how many hairs per square centimeter, but also the thickness of the hairs down to the micron. So it'll literally tell us exactly what's going on in the back of the scalp, the more permanent area.

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Alan Bauman, MD

And we can compare that to what's happening really behind the hairline, where thinning may be occurring, where you don't even really notice. And then, of course, we can find out how much hair is left in a receding temple area. And that predicts how well you're likely to respond to noninvasive treatments.

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Jaclyn Smeaton, ND

So it's so interesting. I didn't know this. So, you know, maybe some of listeners of me there, but I didn't realize that there was like a permanent zone in the more heavily affected zone. But, I mean, I see it all the time when you're styling your hair like the hair in the back and the nape of your neck, it's always healthier.

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Jaclyn Smeaton, ND

And I thought it was maybe just product or sun exposure or, you know, blow drying, like maybe it gets less heat damage or something like that. And I have super curly hair. So when you wash it upside down, like, you know, they curly method, they have you flip your hair over and wash it upside down to kind of preserve the shape of the curls in the front so that it's like, oh, maybe when we're washing, we're putting too much stress on the front.

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Jaclyn Smeaton, ND

But there's actually differences like in the follicles, is that with absolutely. Can you share more about that? It's so interesting.

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Alan Bauman, MD

Yeah for sure. So let's get look at the extreme right. So male pattern baldness. The guy loses all of his hair from the hairline through the mid scalp and the crown. Right. So it goes front to back back to front. And what they're left with is that monks ring around the sides in the back of their scalp.

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Alan Bauman, MD

Guys that are totally, completely bald around the back of their head either have an autoimmune alopecia condition or more commonly, are just shaving their head. Right. So it tells us that genetically, that area is predisposed. And we're and that's why hair transplants work, by the way, you take the hair follicles that are immune to the effects of DHT, and you put them into the other areas that have thinned out, and they will live and grow.

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Alan Bauman, MD

There permanently. Now, there may be other factors that could influence all of your hair nutrition, lifestyle, inflammation, stress. Right? But DHT is not going to affect those transplanted hairs. So that's the good news now. So in women, how do we know that that's the case? Well, sometimes we do see a diffuse little bit of a diffuse loss.

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Alan Bauman, MD

But the measurements tell us how much how good is that density in the back of the scalp in the occipital zone. Right. So your occipital bone is the occipital zone. We can measure that. And we can see the hair quality, meaning the thickness of the hairs and also the hair density. How many hairs per square area of scalp is very high.

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Alan Bauman, MD

And it's usually, I would say 90% of the time that's the best area. And so that area is genetically predisposed to be healthy. And it also, tells us, you know, when we do hair transplants in women, like if we have to restore temple area or we use those areas for lowering the hairline or identifying a thinning spot in the frontal area, those hairs are permanent.

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Alan Bauman, MD

And if they're not on effective medical therapy, they're losing the other hairs. Right. So the transplants remain, but the other hairs or native hairs if you will, need support.

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Jaclyn Smeaton, ND

That's interesting. Yeah. You know, we that's just that's such a fascinating topic. And, like, knowing how important DHT is, like, makes me think about the, the five alpha andro, which I think is a really I'm going to send you the exam. You're going to really love that.

00:24:29:12 - 00:25:00:19

DUTCH

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00:25:00:21 - 00:25:08:17

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00:25:08:19 - 00:25:14:04

DUTCH

Welcome back to the DUTCH podcast.

00:25:14:06 - 00:25:37:17

Jaclyn Smeaton, ND

I wanted to get back to the Testosterone therapy in women, because I think this is something that's really growing and just share that one. That's one of the things I love

with DUTCH Testing is having people go through that before they go start on hormone therapy. I think it's great for men too, because you can actually see how much they convert to estrogens when you give them Testosterone and like whether they need any kind of support on that realm as well.

00:25:37:22 - 00:25:58:03

Jaclyn Smeaton, ND

But for women specifically, you can see what they're doing with Testosterone downstream and better predict if they're going to make more androgenic metabolites or less. And I just want to mention that because I think it's important for any women thinking about Testosterone therapy, because you don't want to have side effects. And it's pretty predictable. You can see what your metabolic pathways are and what you're going to.

00:25:58:05 - 00:26:12:05

Jaclyn Smeaton, ND

You're going to do that Testosterone or how you're going to handle it, or whether you need maybe a lower dose to start than the average person. Because of course, this is kind of an off label, newer area. We don't have as much data on this. And then especially with pellet therapy, because like you said, you can't take the pellets out.

00:26:12:05 - 00:26:21:20

Jaclyn Smeaton, ND

So once they're in their end. So I think knowing ahead of time is so helpful because you can do things to support clearance, but also just better predict what your likelihood of side effects will be.

00:26:21:22 - 00:26:42:00

Alan Bauman, MD

No. And that's absolutely true. You know, I've had the DUTCH Test myself, and so I know, well, I've been on anti androgens and so I wanted to kind of review that first, anti androgen therapy like finasteride do to try that. We just spoke about blocks the five alpha reductase type one and type two and the two category type two in the finasteride category.

00:26:42:00 - 00:27:01:05

Alan Bauman, MD

And that's what prevents the production of the DHT in men and helps us keep our hair. Right. And so all those downstream metabolites are going to get knocked out if

you're on the road and do Test ride, which and, you know, hopefully your functional medicine physician can help you, you know, replace some of those things, but not hurt your hair.

00:27:01:07 - 00:27:24:17

Alan Bauman, MD

Obviously. But the point is, is that, those treatments are really, really important. If you're going to be on Testosterone therapy and you think you're prone to hereditary hair loss, right? Man or man or woman, by the way. So if you're a woman and you're going to be on Testosterone for all the great reasons, but you want to protect your hair, you've got to figure out what kind of anti androgen therapy or should you be considering.

00:27:24:23 - 00:28:01:08

Alan Bauman, MD

Right. Is it a systemic treatment like finasteride or do you castrate orally? Should you do a topical finasteride? We now have topical due to arrived and there are other anti androgens as well. Spironolactone does kind of double duty as a as a diuretic but also has an anti androgen property to it. So these are some of the things, you know on the pharmaceutical side that could be combined with let's say another pharmaceutical like minoxidil, which is, you know, non-hormonal and we know we can chat about that or non-pharmaceutical treatments like low level laser light or platelet rich plasma or other regenerative therapies in that realm.

00:28:01:10 - 00:28:09:07

Jaclyn Smeaton, ND

So what percentage of your patients are finding benefit, like who needs the transplant versus some of these other therapies that you're using in your clinic?

00:28:09:09 - 00:28:30:02

Alan Bauman, MD

Well, I, we do transplant a lot of women. And I'm assuming that was the point of the question is that a lot of women do need hair transplants. By the time they get to me and unfortunately, it's because they've had some pretty poor advice along the way. Their typical dermatologist has kind of either shrug them off for the first ten years of their hair loss situation, or told them to go buy some Rogaine.

00:28:30:04 - 00:28:52:10

Alan Bauman, MD

You know, unfortunately. Or did, some kind of outdated PRP process, which was multiple therapies every month coming back in? You know, that's the best way to know that you're using an outdated treatment like that. Unfortunately, if your dermatologist is saying, yeah, you got to come back every month or a series of 3 or 4 preps and you know that that that PRP process is very much outdated or is not designed for your scalp.

00:28:52:10 - 00:29:16:04

Alan Bauman, MD

That's actually a skin treatment that they're hoping crossing their fingers will do something for your scalp. So we do transplant a lot of women. We sometimes women have a high hairline to begin with, and they want a lower hairline. And so that's a that's not an Andrew genetic alopecia problem. That's just how you're born. And that's okay. DaVinci said that there's a golden ratio one third, one third, one third.

00:29:16:04 - 00:29:44:11

Alan Bauman, MD

And if your hairline is much, much higher than that and you weren't born in the Elizabethan era in the, in England, then you might want a hair transplant to fix that. Because certainly that's, you know, the, the, the only way to restore or lower a hairline, I've had women who have had, over dosages, as we talked about before, with Testosterone therapy, and it's really receded their hairline or completely, diffusely destroyed the frame of their face.

00:29:44:11 - 00:30:11:08

Alan Bauman, MD

They've lost their bangs. They've lost the ability to cover their temples. If they like that style, they can't pull their hair back for outdoor activities, swimming and such. So hair transplantation is certainly a viable option there. But we would never transplant those patients without first addressing the ongoing hair loss situation. We have to do that. So there's always a chat about whether we're using pharmaceutical interventions, medications such as, as we said, minoxidil, finasteride your Test.

00:30:11:09 - 00:30:32:05

Alan Bauman, MD

Right. Those things topical or oral or we're using laser using regenerative therapies PRP or some other stem cell derived treatment, or even treatments like in the office we have Ted trans epidermal delivery of growth factors and peptides. We also have Volks which is a fractional laser that's FDA cleared for hair regrowth. So these are all

options depending on the patient's lifestyle factors.

00:30:32:07 - 00:30:46:05

Jaclyn Smeaton, ND

There are so many new and emerging like applications of longevity longevity approaches really across the board. It's always amazing to me the way they get applied to systems like this. That's really amazing.

00:30:46:06 - 00:31:06:09

Alan Bauman, MD

Well, that's certainly true. And it's been that way for many, many years. It's one of the reasons why I love to go to conferences like the American Academy Anti-Aging. I've been a member since 1998, and many of the therapies that we discovered, for other things, whether it be for skin or for rejuvenation, even peptides and things like that, we've been able to translate that into hair loss therapy.

00:31:06:13 - 00:31:07:10

Jaclyn Smeaton, ND

Yeah. It's amazing.

00:31:07:10 - 00:31:08:06

Alan Bauman, MD

Very successful.

00:31:08:08 - 00:31:22:05

Jaclyn Smeaton, ND

Are there like mitochondrial connections in the scalp as well? Like I know that's kind of when we look at like aging and slowing down aging. There's all these mitochondrial connections. Are there things that you've seen in that crossover into the hair hair space as well?

00:31:22:06 - 00:31:30:03

Alan Bauman, MD

Okay. Well, the hair follicle is the second most highly metabolic cell population in your body. Well, like I said.

00:31:30:05 - 00:31:33:03

Jaclyn Smeaton, ND

Second, just like the particles in the ovaries. Right.

00:31:33:05 - 00:31:34:09

Alan Bauman, MD  
Well. And your bone marrow.

00:31:34:10 - 00:31:35:06

Jaclyn Smeaton, ND  
Okay. Oh.

00:31:35:08 - 00:31:56:08

Alan Bauman, MD  
My, my bone marrow probably would be. Probably bone marrow. Probably trumps to all of those. You know, your immune system, red blood cells are highly replicative. And then, another one would be your gut lining, which replaces every day. So hair follicles are very much up in that, category there. So when you're dealing with a highly metabolic cell population, right, you have 150,000 hair follicles on your scalp.

00:31:56:08 - 00:32:15:11

Alan Bauman, MD  
They're each producing a third of a millimeter of hair per day. Plus the other 5 million hair follicles on your body. Some of them are producing, you know, finer, thinner hair. Hopefully not too much gorilla hair for the for the women, but more for men. There's a huge metabolic commitment there in terms of, nutrients and fuel.

00:32:15:13 - 00:32:42:06

Alan Bauman, MD  
And mitochondria are obviously the workhorses for that. And so that's actually why red light therapy, low level laser light on the scalp at the appropriate wavelength, the appropriate dosing strategy, the appropriate power density, the appropriate coverage of the scalp is going to give you a massive improvement in hair growth. So when patients use like the FDA cleared turbo laser cap, that's different than the Amazon versions that you see out there.

00:32:42:08 - 00:32:56:10

Alan Bauman, MD  
You know, you're no, you're getting a good, powerful, power density, that's going to affect the mitochondria. I mean, we know now, we didn't know 20 years ago, but we know now exactly how red light therapy affects the mitochondria in a great way.

00:32:56:12 - 00:33:12:10

Jaclyn Smeaton, ND

Yeah, it's pretty amazing. The and the the applications. And I agree with you my I've seen the same thing like crossing over into women's health and fertility when it comes to sperm health and egg health and ovarian cell health. And when you look at all these new things, there's new compounds that hit the market. It's like, oh, there's relevance there.

00:33:12:10 - 00:33:17:17

Jaclyn Smeaton, ND

And you just have to wait for the research. Like, I know it's going to be published. I know this will be studied eventually. It's pretty amazing.

00:33:17:17 - 00:33:40:17

Alan Bauman, MD

Absolutely. I mean, look, years ago we used to use a copper peptide kit. This is 20 years ago, this is more than 20 years ago, 1999 to 2007. We use copper peptide at a high rate. We would have patients soak their scalp in copper peptide gauze. We had copper peptide gel. We had copper peptide sprays. Why did we do all of that after hair transplantation?

00:33:40:17 - 00:34:02:19

Alan Bauman, MD

Well, it's because we had some good data and good clinical evidence that it helped with wound healing. And also we thought that it was helping with hair growth. And today, copper tri peptide copper is probably the most well studied peptide in the literature. For preserving hair color. And we we talked a little bit about that, as well as for wound healing and for skin.

00:34:02:21 - 00:34:32:17

Alan Bauman, MD

Some people are injecting it, some people are taking copper supplements, some people using copper liquids. You know, we have peptide serums now that replace minoxidil with patients are sensitive to some of those more pharmaceutical interventions. So it's really exciting to see all of that from years ago. Way back, you know, in the 84M category, you know, of like, you know, cutting edge science or maybe whatever it was and now seeing it being more, you know, mainstream today for sure.

00:34:32:19 - 00:34:50:23

Jaclyn Smeaton, ND

Now, I want to ask you kind of shift gears a little bit, because I know one of the things you mentioned earlier was like when you said, when we were talking about this kind of phase of life for women, menopausal, you mentioned perimenopause. Do you start to see hair changes earlier in that transition phase or later or just all across the board?

00:34:51:01 - 00:35:14:00

Alan Bauman, MD

Well, I would say as the hormones start to shift and change, a variety of things can happen. You know, and, you know, women can complain about a lot of different things of sleep cycles change, you know, weight gain and so forth. And so a lot of that is related to those, hormonal shifts and hair follicles, certainly, as we said, very hard hormonal organ.

00:35:14:00 - 00:35:36:07

Alan Bauman, MD

So it really depends on your sensitivity. So if you, you know, let's say genetically you're blessed and you're not really prone to, female pattern hair loss situation. You might go through, just a little bit of shedding during childbirth and really not be dealing much with, perimenopause or menopause, hair loss changes. But in other folks, it's a lot it's a lot more sensitive.

00:35:36:12 - 00:35:59:16

Alan Bauman, MD

And, perimenopause is the first sign or symptom sometimes that brings women in for hair changes. It seem it correlates. Right. So in those age categories, that's when women typically come in. Men come in much earlier because we see 20% of hair loss, in the male population, 20% of men in the male population, right, in their 20s have visible signs of hair loss already.

00:35:59:19 - 00:36:15:03

Alan Bauman, MD

That that's a little bit different. So we don't see that number one out of five in women in their 20s. Right, right. We don't see that number. So the so the shift is that the women come in at a little bit later on in life, usually around childbirth, menopause, that type of thing.

00:36:15:09 - 00:36:24:03

Jaclyn Smeaton, ND

Are there any early warning signs for women that they should look out for. I know it's hard, but when you mentioned like you could lose half your hair and not notice visibly.

00:36:24:05 - 00:36:49:17

Alan Bauman, MD

Yeah. So you know the early signs and symptoms. Is your ponytail volume changing. Is the color and the quality, the texture of your hair, as you mentioned. Is that changing. So you could have the same numbers of hairs, but if the hairs are much are growing much thinner or shorter, it can look like breakage, like, you know, think of, you know, a branch on a tree, like if, if the end of the branch snapped, obviously the branch would be much, much smaller.

00:36:49:23 - 00:37:08:18

Alan Bauman, MD

Well, and that can happen with hair too. If you mistreat it, you over treat it with chemicals and heat and things like that. But remember that when you see shorter hairs, that's not a sign that, oh, I've got all this new hair growth coming in. Actually, that's a bad sign. That means that the hair follicles are shortening their growth cycle.

00:37:09:00 - 00:37:34:03

Alan Bauman, MD

And typically, unless you're on a magical treatment or a good therapy, usually what's happening is those growth cycles are shortening with each successive cycle. So very often like for example, will part the hair. And we'll notice that right down the part line there's all these little short baby hairs. And this is the first time a patient has ever come in, got an evaluation, has not started any therapies or treatments.

00:37:34:03 - 00:38:01:07

Alan Bauman, MD

This is not some new growth. This is an emergency sign this. These are the follicles crapping out. These are the follicles spending only a month or two in a growing phase. And in another year they're not going to be growing at all. So we say time equals follicles. So I would say the evaluation, the measurements, even if you're not going to do anything, even if you're just going to buy a V, a biotin supplement or something, you know, even if you're just thinking, oh, maybe I'll change my shampoo.

00:38:01:09 - 00:38:17:19

Alan Bauman, MD

And scalp health is another piece of the puzzle which we'll talk about. But even if you're just thinking that hair loss might be occurring or you see it in your family, mom side dads, I've men or women you haven't, you know, great aunt who's got like, you know, ten strands of hair left. You need to come in and get a baseline evaluation.

00:38:17:21 - 00:38:41:03

Jaclyn Smeaton, ND

You made me think I need to do it like we leave here. I need to make an appointment. It's funny, because my, I have genetic hair loss in my family. Like, my grandmother basically had diffuse hair loss until she wore a wig. And then, you know, essentially, when bald, my mom has really serious hair thinning. So I think I have my dad's hair, I don't I because they had lost hair so much earlier in their life, and I haven't really seen that, except I had a huge effluvium earlier this year.

00:38:41:03 - 00:38:45:16

Jaclyn Smeaton, ND

So I have like all this hair that this long growing in around my head, which is an interesting experience.

00:38:45:16 - 00:38:48:08

Alan Bauman, MD

And do you know why you had the shed?

00:38:48:10 - 00:38:56:16

Jaclyn Smeaton, ND

I had a big stress and I had like a big stress on my life. And I think tracing it back, I mean, no, I'm not certain why, but I think that's probably why. But.

00:38:56:18 - 00:39:15:17

Alan Bauman, MD

You know, a lot of things that we see commonly, aside from what we've already talked about, which is childbirth, obviously, this has been a terrible flu season, and we've seen a lot of people come with with fever. And then again, six weeks to eight weeks after that, after they've had a high fever. And remember, years ago we had the Covid situation.

00:39:15:22 - 00:39:16:07

Alan Bauman, MD  
Yeah.

00:39:16:07 - 00:39:28:11

Jaclyn Smeaton, ND

Interesting. I mean, I could have been I had strep throat, Covid flu. Actually, I had the flu that year I think really serious flu. So that might have been it. I didn't even get out of bed for three days. So I wonder if that was the trigger. That's thanks. That's insightful.

00:39:28:13 - 00:39:49:23

Alan Bauman, MD

You know, changes in changes in your diet. Yeah, a lot of folks are today on GLP one agonists. You know, these peptides which impair your, you know, your your desire for food, essentially, right, to decrease your appetite and to slow the motility down, actually, absorption. And so we talked about the need for a proper nutrition, for hair growth.

00:39:50:05 - 00:40:09:15

Alan Bauman, MD

If you're decreasing your caloric intake and decreasing your absorption, your body is switching it into a fat burning mode. And obviously, that's the point. You want to like, start to burn the fat stores, but when your body does that, it immediately thinks that it's in the starvation mode. It doesn't know that you're on a healthy diet or trying to lose a healthy weight.

00:40:09:19 - 00:40:31:07

Alan Bauman, MD

Even though maybe your inflammatory markers are improving, it can still deplete that that whether you're fed or fasting, it's your body makes that switch. And when you're in the fasting mode, let's say, or starvation mode, your body doesn't make good hair. And so sometimes when patients lose a certain number of pounds, a certain percentage of weight, they can also lose hair.

00:40:31:09 - 00:40:51:22

Alan Bauman, MD

And so the GLP one agonists are another common trigger that we see. Over the years. You know, like I said, years and years ago, it was Covid and and stress of the lockdowns and, the fever and so forth. And now we're seeing, a more, a shedding

phase and hair loss exacerbated by the GLP one agonists.

00:40:52:00 - 00:41:05:21

Jaclyn Smeaton, ND

Yeah. I'm glad you bring that up, because especially now that they're so readily available that they're not I mean, in all the call, like a mail order pharmacy, but you can sign up for a membership program. You can get it even if you only have 10 pounds to lose. It's not. Yeah. Because they're compounded and you're paying cash.

00:41:05:21 - 00:41:24:21

Jaclyn Smeaton, ND

It's not restricted to those who meet the obesity or type two diabetes requirements now. So a lot of people are taking them. And I think it's really important because it's such a common side effect. We talked about this in our like medical communities online quite a lot. So I but it's not the medication itself. It's the weight loss associated with the medication.

00:41:24:21 - 00:41:43:04

Jaclyn Smeaton, ND

So I think that's really important to know. You can slow down the weight loss. Maybe, you know, if you're on a GLP one, I always recommend people are like not necessarily counting all of their macros, but at least protein to make sure that you're getting enough protein because it's so easy to under eat. I have you tried one ever taken one the GLP one medication?

00:41:43:04 - 00:42:04:17

Alan Bauman, MD

I've. Oh no, I've never taken. Okay. I'm more of an active more. So but, the point is, is that yes, we do have collagen peptide protein powders that we prescribe, other nutrients and fuel multivitamins, biotin, probiotics, things like that to help support your nutritionally. But I think that's really, really important. If you're not if you don't have adequate protein, you're not going to grow hair.

00:42:04:21 - 00:42:23:14

Alan Bauman, MD

Yeah. You know, starving kids in Africa, right? You see them eating a bowl of oatmeal, you know, they're completely bald. They don't have enough protein in their diet to grow hair. And so obviously that's the extreme. But it's an important vision because if you're if you're losing, if you're not taking in that protein, you're not going to be

supporting hair growth.

00:42:23:16 - 00:42:40:13

Jaclyn Smeaton, ND

So the other thing that I find interesting with weight loss and hair is that, you know, sometimes I think and I don't have data on this, but this is a suspicion that I think is interesting is that when you lose weight, of course, you have caloric. You're, you know, you're under eating and that can impact hair. But also our fatty tissue is where we store toxins.

00:42:40:13 - 00:43:01:23

Jaclyn Smeaton, ND

So if you think about like microplastics and phthalates and heavy metals, all of these types of chemicals get stored in our fatty tissue. So as those fats get oxidized and as you burn that tissue, you're mobilizing toxins back into the bloodstream. So they're almost like stored away, locked up in your fatty tissue. But then once they're back in your bloodstream, they have the ability to affect all your cells.

00:43:02:00 - 00:43:15:14

Jaclyn Smeaton, ND

So I wonder also about that potential impact and whether we need to be like on weight loss protocols, making sure people go to the bathroom regularly and maybe doing some liver support if they had a lot of exposures in the past, just something else. But it's always been on my mind.

00:43:15:15 - 00:43:31:18

Alan Bauman, MD

Oh, absolutely. You're probably onto something there. The hydration is key. Yeah. Look, even if you're in a fasting regimen, just doing a water fast or something with electrolytes, you want to make sure that you've, you know, creating a healthy balance as you're starting to, you know, tune the body in that way.

00:43:31:19 - 00:43:56:12

Jaclyn Smeaton, ND

So when we think about women on hormone therapy, we've talked a little bit about the use of Testosterone and that some women could have side effects of hair loss from high androgens. What about kind of a more traditional menopausal hormone therapy regimen, like an estrogen plus a progestin? Do you see that that improves hair retention over time? Can that even things out, or does it seem to have an impact

plus or minus.

00:43:56:13 - 00:44:17:18

Alan Bauman, MD

So I would say it's about 5050. Okay. You know, we have seen women who are doing, hormone optimization and their hair does seem to improve. But you know what proves that point is the measurements, because sometimes you're starting on the therapy and you're hoping for an overnight response. Your hair is not an overnight indicator. All right.

00:44:17:18 - 00:44:35:14

Alan Bauman, MD

You know, like you, if you wake up and you've had a bad night of sleep, I mean, the bags under your eyes are hard to hide, right? I mean, it's just it's just how it is. I mean, it's a very quick indicator of how well-rested you are, right? But your hair doesn't respond, like, in that way. Like, not as quickly as your skin does.

00:44:35:16 - 00:44:58:19

Alan Bauman, MD

And I, you know, I don't have a better analogy, but it does take months and months of consistent effort. Even in a the best case scenario, you've got an amazing treatment regimen. You're you're stacking all these things together. It's going to take three months for us to measure some changes and 6 to 9 months, maybe even a full year to appreciate how it looks, you know, in the mirror, in terms of a result from a therapy.

00:44:58:19 - 00:45:21:10

Alan Bauman, MD

So I would never dissuade a woman from going under hormone optimization therapy. We know all the great benefits. And of course, now, with the political climate that we're in, we're seeing, much more of this information come out, how beneficial it is. And we see all of the how the negative information was pushed forth, really to the detriment of, of an entire generation of women.

00:45:21:11 - 00:45:32:12

Alan Bauman, MD

So regardless of, political persuasion, I think we can all agree that hormone optimization is going to be essential for life span and health span and maybe hair span.

00:45:32:13 - 00:45:51:22

Jaclyn Smeaton, ND

Yeah, I hope so. I love that term hair span. Here you go. You heard it here. You heard it here. We haven't talked about another contributor to Hair Health and something that a lot of women experience in perimenopause and menopause, which is stress. Can we talk a little bit about stress and the impact of stress on hair?

00:45:52:00 - 00:46:16:05

Alan Bauman, MD

Absolutely. So, we know in the historical literature there's people have said, you know, they went through a stressful period of time and they lost a lot of hair or their hair changed from dark to gray. And, you know, there's some interesting historical accounts of that, obviously. But what I would point to in particular, certainly is the pandemic because of many, many, many people were super stressed out.

00:46:16:05 - 00:46:36:15

Alan Bauman, MD

And if you did your your cortisol measurements during that time and you were dealing with a heavy stress load, you know, you'll see those cortisol levels stay high all the way throughout the, you know, the late afternoon and early evening. And cortisol exposure is not healthy for hair follicles. In fact, it's the quickest way to shut down the hair follicle.

00:46:36:17 - 00:47:02:01

Alan Bauman, MD

Unfortunately, if it's in a petri dish, let's say. So. I think, when we address stress, you know, there's a lot of different levers to put, levers to pull and buttons to push. Right. And so people, that come in who have, a history of, let's say, anxiety, depression, or in a stressful situation, we always talk first about stress management because we're never eliminating stress completely from our lives.

00:47:02:01 - 00:47:21:05

Alan Bauman, MD

But we have to teach our body how to deal with stress better. So I don't care if that's breathwork or poetry writing or sauna or better sleep or go to the gun range. Whatever strikes your fancy, you know, to blow off those stress. You know, that's, whatever works for you, to get that stress level down.

00:47:21:05 - 00:47:38:14

Alan Bauman, MD

That's totally fine and good. I mean, look on your phone today and on your Apple Watch, you could you could have. There's a stress relief button. I mean, you could literally do a couple of breaths and that tends to, help out. So, but, but and, you know, let's just dive in. There's other nutraceutical obviously things that can help you adapt better to stress.

00:47:38:14 - 00:47:52:00

Alan Bauman, MD

Ashwagandha being probably the one that's top of mind. And we do prescribe and have prescribed quite a bit of ashwagandha over 11 years, especially since the pandemic and most people have a pretty good response to it. Kind of hard to overdo it, which is nice.

00:47:52:00 - 00:47:55:18

Jaclyn Smeaton, ND

Yeah, it has a very wide window of safety and efficacy for sure.

00:47:55:19 - 00:48:18:00

Alan Bauman, MD

Yeah. And, you know, and if you're if you're taking it on a daily basis and you don't necessarily have too much stress, you don't your body doesn't use it. But if you have a stressful day that seems to make you more resilient to it. And so and that's just my clinical experience, having treated thousands of patients that, if we can modulate your stress, get you to sleep better, maybe exercise a little bit more, burn it off, you know, then, then that's that's a that's a good thing.

00:48:18:00 - 00:48:29:03

Alan Bauman, MD

And it's good for your hair. So, so stress definitely is a is a hair killer. So it's try try to handle our stress. You know we can't eliminate it. But we can just try to manage it a little bit better I think we can all.

00:48:29:05 - 00:48:38:01

Jaclyn Smeaton, ND

From that I'm glad that you like think about that and talk about that with patients because it seems it makes everything worse. I mean, it's not surprising that stress impacts hair because it impacts every everything.

00:48:38:05 - 00:48:38:13

Alan Bauman, MD

Yeah.

00:48:38:14 - 00:48:45:20

Jaclyn Smeaton, ND

With cortisol receptors like everywhere. I mean it's just a very you know, they have glucocorticoid receptors everywhere in the body. So very quickly.

00:48:46:00 - 00:48:49:18

Alan Bauman, MD

Look. And and there's a reason for that. Right. Because it's a survival mechanism.

00:48:49:18 - 00:48:50:11

Jaclyn Smeaton, ND

Yeah absolutely.

00:48:50:11 - 00:49:05:04

Alan Bauman, MD

Under a stressful situation, you know, you're being chased by a saber toothed tiger or whatever. You know, you want to make sure your body is activated. But but that's that chronic stress. If a death is in the or the, the the dose makes the poison right. So too much, too long, too much exposure. And it's not good.

00:49:05:04 - 00:49:10:01

Alan Bauman, MD

You can't rev that engine at 9000 rpm, for an extended period of time.

00:49:10:05 - 00:49:32:00

Jaclyn Smeaton, ND

Yeah, absolutely. Well, I want to shift gears and before we wrap today, really turn to, like, practical advice for women in perimenopause and menopause who are worried about their hair loss. So first, I mean, we've already talked about what to look for. And if you have seen these like fine hairs or you're seeing that diffuse thinning, you're obviously you want to take some next steps.

00:49:32:00 - 00:49:44:05

Jaclyn Smeaton, ND

So what are the right next steps? I mean, I love the idea of the baseline assessment even before you think things are really bad. What else would you recommend for women kind of earlier on in that process, maybe even things they could do themselves?

00:49:44:07 - 00:50:08:09

Alan Bauman, MD

Yeah, I mean, in the early stages, certainly you want to tanners to get that self inventory going. But on your own you can certainly connect with a board certified hair restoration physician. We, you know, we do a lot of our consultation evaluations initially virtually. So there's, a lot of opportunity to dissect down into those lifestyle factors to try to elucidate what might be impacting your hair.

00:50:08:11 - 00:50:25:13

Alan Bauman, MD

You know, we're sending some photos back and forth. We're looking at video. Obviously, we're connecting online. We can do a lot. I mean, we can't do the measurements through the phone, obviously. So that's where really the rubber meets the road is at that measurement level. But at least we can start to talk about things that might be impacting your hair.

00:50:25:13 - 00:50:44:19

Alan Bauman, MD

And really what's your risk factor. What's the risks that are that are impact could be impacting your hair. Whether it's genetic risk or as we said before lifestyle nutrition. Are you on a weight loss drug. Are you on an antidepressant or you're taking a blood pressure medication or you're taking a statin? All of those things by the way, are bad for your hair.

00:50:44:21 - 00:51:04:19

Alan Bauman, MD

What is your regular routine? You're losing hair or the hair is changing texture. So now using more color, using more, more blow drying and more heat, you're using more chemicals to straighten it. You're trying to combat the frizz. Well, all of that kind of spirals into creating breakage and potentially even scalp health issues, which we didn't really touch on.

00:51:04:19 - 00:51:21:18

Alan Bauman, MD

But that's an important, thing that we should really be looking at as well. We want to make sure the soil in the garden of is healthy for the plants to thrive, and scalp health is an important, over an often overlooked piece of the hair loss puzzle. We want to make sure there's no inflammation at the level of the sun.

00:51:21:18 - 00:51:27:02

Jaclyn Smeaton, ND

I'd love to talk about that more. I mean, we did talk about that a bit before, but I think it like it bears repeating.

00:51:27:04 - 00:51:50:07

Alan Bauman, MD

Yeah for sure. So scalp health is really, really important if your scalp is inflamed, if it's itchy or flaky or even just dry, you know, it might be changing in terms of the, the sebum that's being produced by your scalp, which is the natural oil, and that can change your microbiome. So the microbiome of the scalp, if it gets out of whack, you might have a fungal overgrowth dermatitis situation where it feels like psoriasis.

00:51:50:07 - 00:52:11:06

Alan Bauman, MD

It's itchy and scratchy. All of that needs to be handled. Especially if you're not one who is, routinely shampooing and conditioning your hair, on a regular basis. If you're on a low frequency hygiene regimen, that can put you at risk, too. So I always say you know, time equals follicles, so don't wait. I would recommend anyone who's concerned about their hair.

00:52:11:06 - 00:52:28:06

Alan Bauman, MD

Just get a check. Just get it. Get it examined, get it looked at. This is what we do day in and day out at my practice here in Boca Raton, Florida. Obviously, we have satellite office in New York City as well where we can do these measurements and evaluations. And maybe it's just a check in, maybe once a year for a couple of years.

00:52:28:12 - 00:52:52:13

Alan Bauman, MD

If you're in the very, very early stages, there's no intervention needed. If you're at home and you're thinking about nutritionals and nutraceuticals, certainly we have a line of product which, our, our, our targeted. So, you know, a lot of folks come in to the practice, in their early years and they've never taken a vitamin before. That may

be shocking to you, but, there are there is a population out there that are, not health oriented.

00:52:52:13 - 00:53:21:02

Alan Bauman, MD

So, you know, putting that stress on their proper nutrition, you know, either getting it naturally or supplementing any gaps. As we said, if you're on a weight loss medication, making sure that protein intake is spot on, things like that turbo laser cap is a great at home device. FDA cleared for hair regrowth. It's a truly a medical grade device, so expect to pay a little bit more for that kind of a device than some Amazon knockoff, which you're not even sure if it has the right power density, or even if there's even lasers in it.

00:53:21:04 - 00:53:30:00

Alan Bauman, MD

Years ago, like like their low level laser light therapy devices were being sold without lasers. They were just red light blinky lights. I mean, it was awful and terrible.

00:53:30:01 - 00:53:33:21

Jaclyn Smeaton, ND

Jump right off of team. We probably not going to get anything good there.

00:53:33:23 - 00:53:46:12

Alan Bauman, MD

Yeah. Those are yeah. Amazon and team versions of lasers. Even if it says it's got a high dose. Actually that's usually the indicator that it doesn't unfortunately. So not to pick out any one particular brand.

00:53:46:14 - 00:54:05:06

Jaclyn Smeaton, ND

No, but I think this is so important. I mean, when you're looking at all of us are bombarded with wellness marketing right now, you know, and so I think with these devices, it's like and they're not they're maybe not as expensive as the FDA approved device, but you'd find them on you want to be shopping for something good, but you know, you don't want to spend money on something that's not going to work.

00:54:05:07 - 00:54:07:13

Jaclyn Smeaton, ND

It's literally you might as well flush it down the toilet.

00:54:07:15 - 00:54:28:14

Alan Bauman, MD

Right? And yeah, you don't want to buy like a disposable device. It doesn't make any sense. The cost over time that's going to work in your benefit because this is a device. If you get one like like the like the turbo cap, the turbo has a lifetime warranty. So God forbid or something. You know, if a, if a laser burns out or the cat, you know, chewed the wire or whatever, you know, you lose the battery pack, we'll figure that out.

00:54:28:14 - 00:54:46:14

Alan Bauman, MD

I mean, we can get you one, you know, a repair or replacement and things like that. You know, that's. But that's why a true medical device is really the way to go. And there's also these treatments that you can do at home. So non-pharmaceutical we talked about peptides. So we have a product called Pep grow which works very nicely with the laser by the way.

00:54:46:14 - 00:55:07:04

Alan Bauman, MD

It's got a series of, of peptides and other ingredients which are super helpful. So it's got thymus and beta for a copper tri peptide, as we talked about, it's got PDB, PTB with methyl vaccinate. And so that's a twice a day topical, which is non-pharmaceutical. And I know there's a lot of nutraceuticals that are out there in the market.

00:55:07:04 - 00:55:30:05

Alan Bauman, MD

A lot of you know, when you say bombarded with hair, grow things, you know, a lot of these have made it into the mainstream. And, and many of them are very, very good and have kind of what I would call a protective, protocol, if you will. So something that reduces inflammation, like curcumin, turmeric, something that helps balance the hormones like saw palmetto, ashwagandha components to deal with the stress cortisol and so forth.

00:55:30:05 - 00:55:40:01

Alan Bauman, MD

So these are valuable. But not not a powerful hair regrowth like you would get, let's say a pharmaceutical minoxidil. Oral minoxidil, for example, can be helpful.

00:55:40:07 - 00:55:49:03

Jaclyn Smeaton, ND

Yeah. You know, it's nice. There's so many options available. You know it's for women. So I think the biggest takeaway for me that I'm hearing is like don't wait.

00:55:49:05 - 00:56:10:17

Alan Bauman, MD

Oh, absolutely. So that is the take home message. Yeah. Jacqueline the that time is follicles because these kinds of problems don't get better on their own. They typically just, erode and get worse with time. So it means that hair loss gets worse with time without treatment. And that's why you should seek at least a baseline measurement and some intervention in the early stages.

00:56:10:19 - 00:56:29:03

Alan Bauman, MD

And if something's not working for you, it may not be that you're on the you know, it may not be the it may not be that you're on the wrong treatment program. It may just be that you're applying it incorrectly or you haven't given enough time. So that's why someone who is a board certified hair Australian physician can help guide you, you know, a week or two weeks or three weeks of treatment.

00:56:29:06 - 00:56:35:06

Alan Bauman, MD

That's not enough for anything. Even the best powerful treatment we have takes months to really see results.

00:56:35:10 - 00:56:41:00

Jaclyn Smeaton, ND

Yeah. Definitely great. Anything else? Any final words of recommendations here?

00:56:41:02 - 00:57:03:10

Alan Bauman, MD

Well, I mean, I think, the other things that we should chat about before, the end really, is that there are some brand new therapies that are coming down the pike that are related to the world of stem cell therapy. So today we can actually harvest and bank your hair follicle stem cells non-invasively. So by just simply plucking a hair we're going to get some biologic material, believe it or not.

00:57:03:12 - 00:57:27:13

Alan Bauman, MD

And if we pluck it correctly we can store and bank those hair follicle stem cells indefinitely just like you banked your eggs. Potentially you can bank now your hair follicle stem cells. And now what can we do with those stem cells. Well, we don't have hair follicle cloning yet, but I am optimistic that hopefully within the next next decade, especially with AI powered research, that we might see some breakthroughs in that technology.

00:57:27:15 - 00:57:33:11

Alan Bauman, MD

Wouldn't it be great to have an unlimited supply of hair follicles to implant? That would be amazing and great.

00:57:33:13 - 00:57:33:21

Jaclyn Smeaton, ND

Yeah.

00:57:33:21 - 00:57:55:12

Alan Bauman, MD

That's amazing. That's why I banked my follicles three years ago. But in the interim, we can now make a treatment directly from your hair follicle stem cells. So instead of having to use an off the shelf product like exosomes, which have been created from stem cells that are sitting in a laboratory and, you know, maybe it's somebody's placenta or somebody's adipose tissue or some other source material.

00:57:55:18 - 00:58:22:09

Alan Bauman, MD

And hopefully if you're getting exosome therapy, you're getting it from a pre-COVID source, that type of thing. But if you want your own cellular messages, you can now derive those from your banked hair follicle stem cells, so they can actually duplicate, multiply, cultivate those cells in the laboratory, take the messages that those cells give off, and send it back to the clinic for us to use on your scalp as a hair growth treatment.

00:58:22:11 - 00:58:43:01

Alan Bauman, MD

Eventually this year, maybe by the time this podcast comes out, it'll be injectable. If we get the FDA clearances and approvals correct. And then also we can use it for skin and for many other things as well. So it's a pretty exciting world that we're living in. That

now you can have products for treatment derived personally from your own hair follicle stem cells.

00:58:43:06 - 00:58:45:18

Jaclyn Smeaton, ND

Yeah. That's true personalized medicine for sure.

00:58:45:20 - 00:58:46:17

Alan Bauman, MD

Absolutely.

00:58:46:22 - 00:59:11:00

Jaclyn Smeaton, ND

Great. Well, I've really enjoyed the conversation today. I do want to share. We have a great DUTCH case on hair loss. And we have a lot of extra materials on hair loss. So we'll pull those into the show notes for people. The DUTCH case I'll at least post the report and slides, but I, we might even have a recording of it or get one of our docs to do it to share, because I think there's a really great application like you can assess hormones, androgens.

00:59:11:00 - 00:59:37:11

Jaclyn Smeaton, ND

We have biotin as a, a urinary marker looking for deficiency. You can look at stress levels and cortisol. A lot of things are talked about. So this is such a relevant issue. And I love having your expertise today on the show to share because people are using DUTCH for hair loss. And I think it's a nice way to kind of hone in on that first step of treatment before people end up moving into, injections and replacement other, you know, transplant replacement.

00:59:37:16 - 00:59:57:18

Alan Bauman, MD

Oh, absolutely. You can't measure you can't manage what you can't measure. And so, yeah, you know, doing those evaluations, like you say, with the DUTCH Test, even genetic evaluations and things like that, we have all of those things that we can import together to build the picture of, really, what is happening with your hair situation and then deciding what we need to do about it.

00:59:57:20 - 01:00:04:21

Jaclyn Smeaton, ND

Yeah, absolutely. Well, Doctor Baumann, thank you so much for joining me today. It's always a pleasure. And, I really appreciate your time.

01:00:04:23 - 01:00:17:06

Alan Bauman, MD

Truly my pleasure to be here with you. And of course, if any questions come up, I'm happy to jump back on any time and answer those questions or, you know, your listeners can find me on social media and send me a direct message at DM any time.

01:00:17:07 - 01:00:19:05

Jaclyn Smeaton, ND

Tell us where they can find you.

01:00:19:06 - 01:00:46:12

Alan Bauman, MD

So the most important place, if you've got some questions about hair loss, would be Baumann medical.com Bachmann medical.com. There's thousands and thousands of pages of information that I've personally written over the past 29 years in practice, and hundreds and hundreds of hours of video content about diagnostics and treatments and procedures and patient stories, as well as all the videos and and photos of patients who have had their procedures and treatments with us.

01:00:46:14 - 01:00:59:06

Alan Bauman, MD

But you can always just ask a question so you can just go to the, you know, if you don't want to like, book the console or book the evaluation, you could just fill out the form and, ask a question or email us. You can also find me on all the social media channels. But again time is follicles.

01:00:59:06 - 01:01:11:15

Alan Bauman, MD

So if you have a question, you know, don't hesitate to reach out. We're here for you. I promise that my team will take great care of you in a professional and caring way. And, we'll get you to your hair restoration goals. Make it a great hair year for you.

01:01:11:17 - 01:01:30:18

Jaclyn Smeaton, ND

It's fabulous. Thank you so much. I put all the links in the show notes that Doctor Baumann mentioned and, his social tags and everything, so you can find him. And a

thank you to all of you for listening today. I'm sure you enjoyed this as much as I did. And if you have questions, or you you can certainly contact us on social at DUTCH Test or visit us at [DUTCH Test.com](https://DUTCHTest.com).

01:01:30:20 - 01:01:38:05

Jaclyn Smeaton, ND

Thank you for listening. We have a podcast drop every Tuesday, so I hope you'll be joining me next week. See you soon.

01:01:38:07 - 01:01:51:00

DUTCH

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